

FORM PTO-1390 (Modified) U.S. PATENT AND TRADEMARK OFFICE; U.S. DEPARTMENT OF COMMERCE  
(REV. 7-2005)

ATTORNEY'S DOCKET NUMBER

112857-507

**TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A SUBMISSION UNDER 35 U.S.C. 371**

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)

Unknown **10/565897**

INTERNATIONAL APPLICATION NO.  
**PCT/JP2004/011127**

INTERNATIONAL FILING DATE  
**July 28, 2004**

PRIORITY DATE CLAIMED  
**July 28, 2003**

TITLE OF INVENTION

**IONIC CONDUCTOR, METHOD OF MANUFACTURING THE SAME, AND ELECTROCHEMICAL DEVICE**

APPLICANT(S) FOR DO/EO/US

**Hirakimoto et al.**

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a submission under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a submission under 35 U.S.C. 371.
3. ☒ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (24) indicated below.
4. ☐ The US has been elected (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371 (c)(2))
  - a. ☐ is attached hereto (required only if not communicated by the International Bureau).
  - b. ☒ has been communicated by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☒ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
  - a. ☒ is attached hereto.
  - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
  - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ have been communicated by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☒ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
10. ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).
11. ☐ A copy of the International Preliminary Examination Report (PCT/IPEA/409).
12. ☒ A copy of the International Search Report (PCT/ISA/210).

Items 13 to 23 below concern document(s) or information included:

13. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
14. ☒ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
15. ☒ A **FIRST** preliminary amendment.
16. ☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
17. ☐ A substitute specification.
18. ☐ A power of attorney and/or change of address letter.
19. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.
20. ☐ A second copy of the published International Application under 35 U.S.C. 154(d)(4).
21. ☐ A second copy of the English language translation of the International Application under 35 U.S.C. 154(d)(4).
22. ☒ Express Mail Label No. **EV 551747524 US**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

U.S. APPLICATION NO (if known, See 37 CFR 1.5)

10/545097  
Unknown

INTERNATIONAL APPLICATION NO.

PCT/JP2004/011127

ATTORNEY'S DOCKET NUMBER

112857-507

23. Other items or information:

Return receipt postcard;  
Forms PCT/ISA/220, 210, 237; Forms PCT/IB/301, 304, 308;  
Formal Drawings (16 sheets);  
PCT Published Application including Search Report;

The following fees have been submitted:				CALCULATIONS	PTO USE
24. <input checked="" type="checkbox"/> Basic national fee			\$300	\$ 300.00	
25. <input checked="" type="checkbox"/> Examination fee (37 CFR 1.492(c))				\$ 200.00	
If the written opinion of the ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article				\$0	
All other situations.				\$200	
26. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b))				\$ 400.00	
If the written opinion of the ISA/US or the International preliminary examination report by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4).				\$0	
Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the as an International Searching Authority.				\$100	
International Search Report prepared by an ISA other than the US and provided to the previously communicated to the US by the IB.				\$400	
All other situations.				\$500	
<b>TOTAL OF 24, 25 and 26 =</b>				\$ 900.00	
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(i)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole)	RATE		
70 - 100 =	0 /50 =	0	x \$250.00	\$ 0.00	
Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).				\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	26 - 20 =	6	x \$50.00	\$ 300.00	
Independent claims	5 - 3 =	2	x \$200.00	\$ 400.00	
MULTIPLE DEPENDENT CLAIMS (if applicable) <input type="checkbox"/> + \$360.00				\$ 0.00	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				\$ 1,600.00	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.				\$ 0.00	
<b>SUBTOTAL =</b>				\$ 1,600.00	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).				\$ 0.00	
<b>TOTAL NATIONAL FEE =</b>				\$ 1,600.00	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40 per property +				\$ 0.00	
<b>TOTAL FEES ENCLOSED =</b>				\$ 1,600.00	
<div style="border: 1px solid black; padding: 5px;"> <p>The PTO did not receive the following listed item(s) <u>check</u></p> <p><u>\$1600.00 only</u></p> </div>				Amount to be	\$
				Amount to be	\$

10/565897

PTO-1390 (Rev. 07-2005)

Approved for use through 3/31/2007. OMB 0651-0021

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

- a. ☒ A check in the amount of \$ \$1,600.00 to cover the above fees is enclosed.
- b. ☐ Please charge my Deposit Account No. \_\_\_\_\_ in the amount of \$ \_\_\_\_\_ to cover the above fees.  
A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 02-1818. A duplicate copy of this sheet is enclosed.
- d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. **Credit card information should not be included on this form.** Provide credit card information and authorization on PTO-2038.

**NOTE:** Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:

Thomas C. Basso (46,541)  
Cust. No. 29175

  
SIGNATURE

Thomas C. Basso

NAME

46,541

REGISTRATION NUMBER

January 25, 2006

DATE

10/5658-97

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IAP20 Rec'd PCT/PTO 25 JAN 2006

Applicants: Hirakimoto et al.  
Appl. No.: Unknown  
Filed: January 25, 2006  
Title: IONIC CONDUCTOR, METHOD OF MANUFACTURING THE SAME, AND  
ELECTROCHEMICAL DEVICE  
Art Unit: Unknown  
Examiner: Unknown  
Docket No.: 112857-507

Mail Stop PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

CERTIFICATE OF MAILING BY EXPRESS MAIL UNDER 37 CFR 1.10

Sir:

I hereby certify that the following documents relating to the above-identified application:

- |   |  |
|---|--|
| 1. Transmittal Letter (dup.);                       | 10. Preliminary Amendment (10 pgs.);             |
| 2. English Trans. of Int'l App. as filed (54 pgs.); | 11. Formal Drawings (16 sheets);                 |
| 3. Executed Dec. and POA ( 4 pgs.);                 | 12. Form PCT/IB/301, 304, 308; PCT/ISA/220,      |
| 4. Information Disclosure Statement (2 pgs.);       | 210, 237;  |
| 5. PTO Form 1449;                                   | 13. PCT Publication Application including Search |
| 6. References Cited;                                | Report;  |
| 7. Return Receipt Postcard – Assignment;            | 14. Check in the amount of \$1,600.00; and       |
| 8. Recordation Form Cover Sheet (duplicate);        | 15. Return receipt postcard.                     |
| 9. Assignment (2 pgs.);                             |  |

are being deposited with the United States Postal Service with sufficient postage as Express

Mail in an envelope addressed to:

Mail Stop PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

on January 25, 2006.

Respectfully submitted,

BELL, BOYD & LLOYD LLC

Heather Foster

Name of Person Mailing Correspondence

Signature

EV 551747524 US

Express Mail Mailing Label Number